

### Product datasheet for AP12664PU-N

# Product datasneet for AP 12004PU-N

# p21 (CDKN1A) pThr145 Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IHC, WB

Recommended Dilution: ELISA: 1/1,000.

Western Blot: 1/100-1/500.

Dot Blot: 1/500.

Immunohistochemistry: 1/50~1/100.

Reactivity: Human Host: Rabbit

**Isotype:** Ig

**Clonality:** Polyclonal

Immunogen: This antibody is generated from rabbits immunized with a KLH conjugated synthetic

phosphopeptide corresponding to amino acid residues surrounding T145 of human P21CIP1.

**Specificity:** This antibody detects p21Cip1 pThr145.

**Formulation:** PBS with 0.09% (W/V) Sodium Azide as preservative.

State: Aff - Purified

State: Liquid purified Ig fraction.

**Concentration:** lot specific

**Purification:** Protein A affinity Chromatography. Then, the antibody fraction is peptide affinity purified in a

2-step procedure with peptides. The antibody is eluted with high and low pH buffers and

neutralized immediately, followed by dialysis against PBS.

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: cyclin-dependent kinase inhibitor 1A

**Database Link:** Entrez Gene 1026 Human

P38936



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



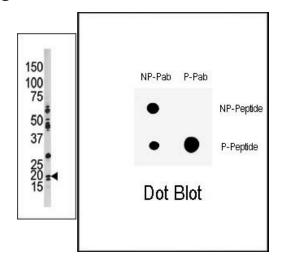
#### Background:

P21CIP1 is a potent cyclin-dependent kinase inhibitor. This protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at G1. Expression is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. P21CIP1 can interact with proliferating cell nuclear antigen (PCNA), a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein has been reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of CDK2, and may be instrumental in the execution of apoptosis following caspase activation.

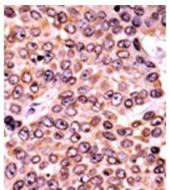
Synonyms: CAP20, CDKN1, CIP1, MDA6, MDA-6, PIC1, SDI1, WAF1

Note: Molecular weight: 17988 Da

#### **Product images:**



LEFT)The anti-Phospho-P21CIP1 pThr145 Pab is used in Western blot to detect Phospho-P21CIP1-T145 in Hela tissue lysate. (RIGHT)Dot blot analysis of anti-Phospho-P21CIP1 pThr145 Antibody on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antobodies working concentration was 0.5ug per ml.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.